

GROH, Gejza, inz.

Examination of factors affecting the electrical load. Energetika
Cz 12 no.9:462-464 S '62.

1. Energeticky ustav, Bratislava.

GROH, Jindrich, MUDr

Use of penicillin and streptomycin in isolation of cutaneous fungi. Cesk.derm. 29 no.3:187-189 Je '54.

1. Z pathologicko-anatomickeho ustavu (prof. MUDr ant. Fingerland)
Vojenske lekarske akademie v Hradci Kralove.

(FUNGI,

*isolation from skin, purification of cultures with
penicillin & streptomycin)

(SKIN, bacteriology,

*fungi, isolation, purification of cultures with penicillin
& streptomycin)

(STREPTOMYCIN, effects,

*purification of fungi during isolation from skin)

(PENICILLIN, effects,

*purification of fungi during isolation from skin)

GROH, J.

CHRNOROSKY, Jindrich, MUDr; GROH, Jindrich, MUDr

Clinical picture of ruptured interventricular septum complicating myocardial infarction. Cas. lek. cesk. 93 no.38:1030-1036 17 Sept 54.

1. Z interni kliniky Vojenske lekarske akademie v Hradci Kralove.
(MYOCARDIAL INFARCT, complications,
interventricular septum rupt.)
(HEART,
interventricular septum rupt. in myocardial infarct)

~~Lindbergh~~, Groh, Jinkrich

CZECH

✓ Post-mortem diagnosis of uremia based on the estimation of creatinine level in blood and cerebrospinal fluid. Jinkrich Groh (Pathol. anat. Ústav, Hradec Králové, Czech.). *Časopis lékařů českých* 93, 1317-19 (1954). -- Creatinine (1) was estd. according to Bonanes and Tausky (C.A. 39, 28407) but without adsorption on Lloyd reagent. The blood I level remained practically unchanged during the first 22 hrs. after death. In cerebrospinal fluid, I rose by less than 1 mg. %. Blood I levels exceeding 5 mg. % together with pathol. findings in kidneys or obstruction of the urinary tract, led to the diagnosis of uremia. Without these anatomical findings, hypercreatininemia could be attributed to extrarenal causes. Similar significance should be attached to cerebrospinal fluid levels exceeding 3.5-4 mg. % of I. Ivo M. Hala

GROH, Jindrich, MUDr.; CERNOHORSKY, Jindrich, MUDr.

Dissecting aortic aneurysm. Vnitr. lek., Brno 1 no.6:
426-435 June 55.

1. Z interni kliniky VLA a z I. intrni kliniky v Olomouci.
MUDr. J. C. Olomouc, nemocnice.
(AORTIC ANEURYSM
dissecting, incidence & diag.)

CERNOHORSKY, Jindrich, MUDr.; GROH, Jindrich, MUDr.

Isolated calcifying aortic stenosis. Cas. lek. cesk. 94 no.20:
542-547 13 May 55.

1. Interní klinika v Hradci Králové.
(AORTIC VALVE, stenosis,
calcifying, diag., reasons of errors)

ČERNOHORSKY, Jindrich, MUDr; GROH, Jindrich, MUDr.

Isolated calcifying aortic stenosis. Cas.lek.cesk. 94 no.20:
547-550 13 May 55.

1. Interní klinika v Hradci Králové.
(AORTIC VALVE, stenosis,
diag., x-ray)

GROH, Jindrich, MUDr.

Incidence of fungus diseases in the Hradec Kralove region. Cesk.
derm. 31 no.3:152-154 June 56.

1. Z pathologickoanatomickeho ustau VLA v Hradci Kralove
(predn. prof. MUDr. Ant. Fingerland).

(FUNGUS DISEASES,
skin, statist. in Czech. (Cz))

(SKIN, diseases,
fungus dis., statist. in Czech. (Cz))

CZECHOSLOVAKIA/Human and Animal Physiology (Normal and
Pathological) Metabolism. Water and Salt Exchanges.

T-2

Abs Jour : Ref Zhur - Biol., No 11, 1958, 50527

Author : Groh, J., Erben, J.

Inst : -

Title : The Pathogenesis of Kalium Deficiency in Idiopathic
Steatorrhea.

Orig Pub : Ceskosl. gastroenterol. a vyziva, 1957, 11, No 4, 252-
257.

Abstract : No abstract.

Card 1/1

CERNIK, F.; RANON, J.; GROH, J.

Successful splenectomy after repeated bacteremia after subacute bacterial endocarditis. Cas. lek. cesk. 99 no.11:330-332 11 Mr '60.

(HYPERSPLENISM surg.)

(ENDOCARDITIS SUBACUTE BACTERIAL compl.)

(SEPTICEMIA compl.)

NERAD, V.; GROH, J.; Technicka spoluprace HORALKOVA, E.; PELIKANOVA, V.

Relation between active prothrombin factors and some blood serum enzymes. Cesk. gastroent. vyz. 15 no.2:102-106 Mr '61.

1. I interni klinika v Hradci Kralove, prednosta prof. MUDr. J. Rehor.

(PROTHROMBIN) (ENZYMES blood)

GROH, Jindrich

Creatinine transphosphorylase in myocardial infarction. Cas.lek.
cesk 100 no.27/28:883 7 J1 '61.

1. Katedra vnitřního lékařství fakulty KU v Hradci Králové, přednosta
prof. MUDr. J. Rehor.

(MYOCARDIAL INFARCT metab)
(TRANSPHOSPHORYLASES metab)

RADOCHA, Karel; GROH, Jindrich

Comparison of the therapeutic effectiveness of chlorothiazine and hydrochlorothiazide SPOFA in the treatment of edemas in pregnancy. Sborn. ved. prac. lek. fak. Karlov.univ. (Hrad Kral) 4 no.5:583-589 '61.

1. Gynekologicko-porodnicka klinika; prednosta prof. DrSc. MUDr. J. Pazourek I. interni klinika; prednosta prof. DrSc. MUDr. J. Rehor.
(CHLOROTHIAZIDE) (HYDROCHLOROTHIAZIDE)
(PREGNANCY COMPLICATIONS) (EDEMA)

BARTOS, Vladimir; GROH, Jindrich; ERBEN, Josef; Technicka spoluprace DOBROVOLNA,
Anna; KOUBOVA, Marie; SCHROFLOVA, Alena; SEDLACKOVA, Stanislava

The diuretic value of chlorothiazide Spofa and hydrochlorothiazide
(Esidrex Ciba). Cas. Lek. Cesk. 101 no.5:129-138 2 F '62.

1. I interni klinika lekarske fakulty KU v Hradci Kralove, prednosta
prof. DrSc. MUDr. Jan Rehor.

(CHLOROTHIAZIDE)

GROH, J.; CERNIK, F.; REZAC, V.; CHROBAK, L.; NERAD, V.

Sulfhemoglobinemia. Cas. Lek. Cesk. 101 no.5:151-153 2 P '62.

1. I interni klinika lekarske fakulty KU v Hradci Kralove, prednosta
prof. DrSc. MUDr. Jan Rehor. Klinika interni propedeutiky lekarske
fakulty KU v Hradci Kralove, prednosta doc. MUDr. Frantisek Cernik.

(HEART DEFECTS CONGENITAL diagn)
(ACETOPHENETIDIN toxicol)
(SULFONAMIDES toxicol)

GROH, Jindrich; Technicka spoluprace KLAPAC, Petr; PELIKANOVA, Vlasta

GOT/GPT relations in the differential diagnosis of fresh myocardial infarct. Cas. Lek. Cesk. 101 no.5:153-156 2 F '62.

1. I interni klinika lekarske fakulty KU v Hradci Kralove, prednosta prof. DrSc. MUDr. Jan Rehor.

(MYOCARDIAL INFARCT diagn) (TRANSAMINASES blood)

GROH, Jindrich; Technicka spoluprace SURCOVA, Dagmar

Enzymatic microdetermination of glucose in the blood. Cas. Lek. Cesk.
~~101~~-no.12:374-376 23 Mr '62.

1. I interni klinika lebarske fakulty KU v Hradci Kralove, prednosta
prof. MUDr. Jan Rehor.

(BLOOD SUGAR chem)

Gron, J.

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CZECHOSLOVAKIA

ERBEN, J; GRON, J; BARTOS, V; KUCH, V; KVASNICKA, J; NAVRATIL, P; PELIKANOVA, V; SEDLACKOVA, S.

1. First Internal Medicine Clinic LF KU (I. vnitřní klinika LF KU), Hradec Králové; 2. Urological Clinic LF KU, (Urologická klinika LF KU), Hradec Králové

Brno, Vnitřní lékařství, No 9, 1963, pp 892-899

"Our Experience with the Treatment with Hemodialysis
(I. Some Methodological Remarks, Indications and
Analysis of Complications."

SECRET

ERSEN, J; BRIL, J; CHIKOS, A; HOSE, V; IVANOVICH, J; KAVRATIL, P.

1. Chair of Internal Medicine of LNU (Katedra vnitřního lékařství LNU), Hradec Králové; 2. Urological Clinic of LNU (Urologická klinika LNU), Hradec Králové.

Prague, Vnitřní lékařství, No 10, 1963, pp 990-999

"Treatment of Acute Anuria by Hemodialysis (HD)."

61

FIEDLER, Zdenek; LOMSKY, Radovan; GROH, Jindrich; CERNIK, Frantisek;
FINGERLAND, Antonin; JINDRAK, Karel; ZDRAHAL, Leopold.

Surgical problems in endocrine-active tumors of the islands
of Langerhans. Sborn. ved. prac. lek. fak. Karlov. Univ. (Hrad.
Kral.) 6 no. 3: 229-237 '63.

1. Chirurgická klinika (prednosta: prof. MUDr. J. Procházka);
I. interní klinika (prednosta: prof., MUDr. J. Rehor); Pato-
logicko-anatomický ústav (prednosta: DrSc., prof., MUDr. A.
Fingerland) a Neurologická klinika (DrSc., prof., MUDr. M.
Sercí), Universita Karlova.

*

BARTOS, Vladimir; GROH, Jindrich; technicka spoluprace: KELIEROVA, Olga;
PELIKANOVA, Vlasta.

Importance of determining serum transaminase in patients
with chronic recurrent pancreatitis. Sborn.ved.prac.lek.
fak.Karlov.Univ.(Hrad.Kral.) 6 no.3:325-329 '63.

1. I interni klinika, Universita Karlova (prednosta: prof.,
MUDr. F.Cernik).

*

ERBEN, Josef, GROH, Jindrich, LOMSKY, Radovan; SVAB, Jozef; HEROUT, Vladimir; NOZICKA, Zdenek; KVASNICKA, Jiri; BARTOS, Vladimir; KVASNICKOVA, Eva. Technicka spoluprace :SCHROFLOVA, A.

Primary aldosteronism in adrenal cortex carcinoma. II. Sborn. ved. prac. lek. fak. Karlov. univ. (Hrad. Kral.) 6 no.5: suppl. 601-607 '63

1. I. interni klinika (prednosta: prof. MUDr. F. Cernik); Urologicka klinika (prednosta: doc. MUDr. Jozef Svab); Patologicko-anatomicky ustav (prednosta: DrSc. prof. MUDr. A. Fingerland) Karlova universita v Hradci Kralove.

GROH, Jindrich; KVASNICKOVA, Eva; KVASNICKA, Jiri; BARTOS, Vladimir;
ERBEN, Josef.

Determination of minerals, proteins and glycogen in muscle.
Sborn. ved. prac. lek. fak. Karlov. univ. (Hrad.Kral.) 6
no.5 suppl.:619-621 '63

1. I. interni klinika (prednosta: prof. MUDr. F.Cernik) Kar-
lova universita v Hradci Kralovo.

ERBEN, J.; BELOBRADKOVA, J.; STEFAN, H.; GRON, J.; BARTOS, V.;
KRCH, V.; KVASNICKA, J.; HAVRATIL, P.
KLAZAROVA, M., technicka spoluprace; SCHROFLOVA, A., technicka
spoluprace.

Hemodialysis in the treatment of acute uremia (III)
Cesk pediat 18 no. 3:193-199 '63.

1. Interni, detska, chirurgicka a urologicka klinika
lekarske fakulty KU v Hradci Kralove; prednostove:
doc. dr. F. Cernik, prof. dr. J. Blecha, prof.
dr. J. Prochazka, doc. dr. J. Svab
(UREMIA) (DIALYSIS) (HYPERKALEMIA) (KIDNEY, ARTIFICIAL)

KVASHNICKA, Jiri; KVASNICKOVA, Eva; GROH, Jindrich; DANICKOVA, Zdena;
BARTOS, Vladimir; EREEN, Josef. Techn. spoluprace VAVROVA, Eva.

Mineral and water changes during the aging process. I. Methods
of determination of minerals in erythrocytes. Normal values.
Differences between the normal values in women and men. Sborn.
ved. prac. lek. fak. Karlov. Univ. 9 no.1:369-374 '64.

Mineral and water changes during the aging process. II. Mineral
and water changes in erythrocytes in different age groups.
Ibid.:375-381

1. I. interni klinika (prednosta: prof. MUDr. F. Cernik)
Karlovy University v Hradci Kralove.

GRON, Jindrich

Mineral and water changes during the aging process. III. A
needle for withdrawal of biopsy samples for biochemical
muscle examination. Sborn. ved. prac lok. fak. Karlov.
Univ. 9 no.1:383-386 '64.

1. I Interni klinika (prednosta: prof. MUDr. F.Cernik),
Karlov University v Hradci Kralovo.

KRCH, Vaclav; ERBEN, Josef; GROH, Jindrich; BARTOS, Vladimir; KVASNICKA, Jiri; BALCAR, Zdenek

The course of hemodialysis in elderly patients with acute renal failure. Sborn. ved. prac. lek. fak. Karlov. Univ. 9 no.1:397-408 '64.

1. I. interni klinika (prednosta: prof. MUDr. F. Cernik), Karlovy University v Hradci Kralove.

DURA, J.; TOUSEK, M.; GROH, J.

Paroxysmal nocturnal hemoglobinuria. III. Pathology. Cas. lek.
cesk. 103 no.25:705-708 19 Je'64

1. Patologickoanatomicky ustav lekarske fakulty KU [Karlovy
university] v Hradci Kralove (prednosta: prof. dr. A.Fingerland,
DrSc.); Interni oddeleni nemocnice v Novem Bydzove (vedouci:
MUDr. M.Tousek) a I. Interni klinika lekarske fakulty KU
[Karlovy University] v Hradci Kralove (prednosta: prof. dr.
J.Rehor, DrSc.).

EE

GROH, J., BRZEK, V.; BARTOS, V.

~~DDR~~

I. Medical Clinic and Surgical Clinic of Charles University, Hradec Kralove,
Czechoslovakia

Berlin, Acta Biologica et Medica Germanica, No.1, 1965, pp 30-33.

"The Electrolytic Composition in Lymph of the Ductus Thoracicus of Men"

ROHL, J.

Determination of electrolytes in the muscle obtained by needle biopsy. Vnitřní lek. 11 no.4:339-341 Apr 5.

L. I. vnitřní klinika LFK v Hradci Králové (prednáší: prof. MUDr. P. Čermák).

HRADSKY, Mikulas; KRCH, Vaclav; GIRON, Jindrich

Stomach cytology with the fluorescence method with the use
of acridine orange. Sborn. ved. prac. lek. fak. Karlov.
Univ. 8 no.2:277-283 '65.

1. I. Interni klinika (prednosta: prof. MUDr. F. Cernik)
Lekarske fakulty Karlovy University v Hradci Kralove.

GROH, Vladimir

Omental cyst in a 4-year-old boy. Cesk. pediat. 17 no.3:235-236
Mr '62.

1. Detska chirurgie OUNZ v Gottwaldove, prednosta MUDr. Vladimir Groh.
(OMENTUM diseases) (LYMPHANGIOMA in inf & child)

PODLESAKOVA, B., inz.; BENDA, O.; GROHA, G., inz.; JILEK, inz.;
NANADAL, K., inz.

Conference on the results of the International Symposium on
Rationalization of Electric Power Consumption in Warsaw.
Energetika CzeSuppl.:13 no.7:1-11 '63.

GROHMAN, A.; SZYMASZEK, J.

Low temperature resistance minimum in Ag and Cu whiskers.
Acta physica Pol 24 no.2:285-287 Ag '63.

1. Institute of Physics, Low Temperature Laboratory, Polish
Academy of Sciences, Wroclaw.

GROHMAN, Antoni, mgr.; WOJCIECHOWSKI, Kazimierz, dr.

Scientist and detective. Problemy 19 no.8:517-519 '63.

GROH, R.

"Synthetic Materials in Radio Technology", P. 124, (RADIOTECHNIKA, Vol. 4,
No. 6, June 1954, Budapest, Hungary)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12,
Dec. 1954, Uncl.

GROH, R.

"Production of Transformer-Coil Bases Without Using Adhesives", P. 125,
(RADIOTECHNIKA, Vol. 4, No. 6, June 1954, Budapest, Hungary)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12,
Dec. 1954, Uncl.

GROH, R.

"Additional Lessons From an Additional Conference", P. 126, (RADIOTECHNIKA, Vol. 4, No. 6, June 1954, Budapest, Hungary)

SO: Monthly List of East European Accessions, (KEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

GRQI, R.

"Impregnation of Radio Parts." p. 190 (RADIOTECHNIKA. Vol. 4, No. 7/8, July/Aug. 1954; Budapest, Hungary.)

So: Monthly List of East European Accessions, (EMAL), LC, Vol. 4, No. 4, April 1955, Uncl..

BARTOS, Vladimir; BRZEK, Vladimir; GROH, Jindrich

Sectetlin-induced changes in the amylase level of the thoracic duct depending on age. Sborn. ved. prac. lek. fak. Karlov. Univ. 8 no. 4:467-471 '65

1. I. interni klinika (prednosta: prof. MUDr. P. Cernik)
a Chirurgicka klinika (prednosta: prof. MUDr. J. Frochazka, DrSc.).

GRCH, Jindrich; DIVSKY, Vladislav

Spectrofluorometry. Sborn. ved. prac. lek. fak. Karlov. Univ.
8 no. 4481-484 ' 65.

1. I. interni klinika (prednosta: prof. MUDr. F. Cernik)
a Ceskoslovenske naftove motory, Plzeň nad labem (podnik.
red. C. Vornac).

L 59567-65 EWT(1)/EWT(m)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD/GG

ACCESSION NR: AT5009439

CZ /0000/64/000/000/0071/0080

AUTHOR: Grohman, Antoni

TITLE: Some ~~superconducting~~²¹ and other properties of Sn²¹ and In²¹ whiskers ³⁸ _{BT}

SOURCE: Conference on Low Temperature Physics and Techniques. 3d, Prague, 1963. ¹⁸
Physics and techniques of low temperatures; proceedings of the conference. Prague,
Publ. House of the Czechosl. Academy of Sciences, 1964, 71-80

TOPIC TAGS: whisker, filamentary crystal, tin, indium, superconductivity, tensile strength, Curie temperature, diffusion property

ABSTRACT: The purpose of the investigation was to check on the feasibility of using Sn and In whiskers in superconductivity research, inasmuch as the technique of mounting tin whiskers described in the only published papers was not perfect, and only a few samples were investigated. The whiskers were obtained by a method described by R. M. Fisher et al. (Acta Met. 2 (1954) 368), and by a modification of the method of J. Franks (Acta Met. 6 (1958) 103). The lengths of the tin and indium whiskers reached 8 and 15 mm, respectively. Whiskers were also grown from the gaseous phase, but the lengths obtained by this technique were quite short. The whisker mounting technique is described, and was such that abrupt (~ 0.01K) transitions of whiskers from the normal to the superconducting states could be obtained. The critical magnetic fields (longitudinal and transverse) were measured

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ACCESSION NR: AT5009439

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for whiskers of various diameters in the temperature range 2--3.72K. The depth of penetration of the magnetic field, calculated on the basis of the Ginzburg-Landau superconductivity theory, turned out to be almost double the value obtained from other measurements. This suggests either that the customary approximation is too rough or that the dependence of the penetration on the mean free path is much greater than that obtained for bulk tin. The shift of the Curie temperature in tension was also measured and found to be ~ 0.3 K. Another phenomenon investigated was the backward diffusion of mounted whiskers into the layers on which they were deposited, and the transition from the β to the α phase of the tin. "The author thanks Academician P. L. Kapitza for enabling this work to be done at the Institute of Physics Problems AN SSSR, and to Corresponding Member of AN SSSR, N. Ye. Alekseyevskiy, for advice and help." Orig. art. has: 8 figures.

ASSOCIATION: Laboratory of Low Temperatures, Institute of Physics, Polish Academy of Sciences, Wroclaw, Poland

SUBMITTED: 0000064

ENCL: 00

SUB CODE: EM, TD

NR REF SOV: 003

OTHER: 008

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Card 2/2

L 41341-66

ACC NR: AP6021910

SOURCE CODE: PO/0045/66/029/003/0303/0308

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2

AUTHOR: Grohman, Antoni; Wojda, Lucjan

ORG: [Grohman] Institute of Physics of the Polish Academy of Sciences, Low Temperature Laboratory, Wroclaw (Instytut Fizyki PAN, Zaklad Niskich Temperatur); [Wojda] Experimental Physics Department, University of Wroclaw, Wroclaw (Uniwersytet Wroclawski, Katedra Fizyki Doswiadczalnej)

TITLE: Environment-temperature influence on the operation of a Bayard-Alpert gage

SOURCE: Acta physica polonica, v. 29, no. 3, 1966, 303-308

TOPIC TAGS: temperature effect, environment ^{simulation,} ~~temperature~~, ultrahigh vacuum, ^{pressure} ~~measurement~~ gage/Bayard-Alpert ^{process} gage

ABSTRACT: It is found that by lowering the temperature of the environment, one can increase the pumping speed of a Bayard-Alpert (B— A) gage and thus improve the ultimate vacuum. At liquid air temperature, the pumping speed is many times higher than at room temperature, the ultimate pressure being smaller by two orders

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ACC NR: AP6021910

of magnitude, and a further increase of pumping speed is observed when passing to liquid-helium temperature. The B— A gage in continuous operation uses up 200 cm³ liquid air per hr. It is pointed out that the use of B— A gage at liquid-air temperature is most suitable when having to produce an ultrahigh vacuum within a relatively small volume, e. g. , in glass tubes of field emission microscopes. The authors are very much indebted to Professor Dr. J. Nikliborc and to Docent Dr. B. Makiej for many helpful discussions and valuable remarks. Orig. art. has: 5 figures. [Authors' abstract] [KS]

SUB CODE: 20/ SUBM DATE: 13Sep65/ ORIG REF: 004/ SOV REF: 002/

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L 44121-66 T/EWP(t)/ETI IJP(c) JD

ACC NR: AP6021913 SOURCE CODE: PO/0045/66/029/003/0419/0422

AUTHOR: Grohman, Antoni; Wojda, Lucjan 28
B

ORG: [Grohman] Institute of Physics of the Polish Academy of Sciences, Low Temperature Laboratory, Wroclaw (Instytut Fizyki PAN, Zaklad Niskich Temperatur); [Wojda] Experimental Physics Department, University of Wroclaw, Wroclaw

TITLE: Growth of Bi whiskers from the gaseous phase in ultrahigh vacuum
[Presented at 19th Congress of Polish Physicists, Cracow, 20-25 September 1965] H

SOURCE: Acta physica polonica, v. 29, no. 3, 1966, 419-422

TOPIC TAGS: bismuth whisker, whisker growth, ultrahigh vacuum, cryopump

ABSTRACT: A new method of ⁴whisker growth from the gaseous phase in ultrahigh vacuum is described. ¹Bi whiskers of maximum purity were obtained using an apparatus, shown in a diagram in the original article, consisting of a specific system designed for the growth of whiskers and a cryopump to maintain ultrahigh vacuum during growth. Bi whiskers of about 5 mm in length with a diameter of $1\mu m$ were obtained. Liquid helium was employed for the cryostat. The method described can

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ACC NR: AP6021913

be employed in producing whiskers of highest chemical purity from a variety of materials, even those possessing a small vapor pressure near the melting point. Orig. art. has: 1 figure and 2 tables. [KS]

SUB CODE: 20// SUBM DATE: 21Aug65/ SOV REF: 001/ OTH REF: 007/

Card 2/2 LC

GROHMAN, J.

"Thoughts on technical literature of electrical engineering."

Elektrotechnicky Obzor. Praha, Czechoslovakia. Vol. 48, no. 3, Mar. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 6, Jun 59, Unclass

GROHMAN, A.

Distr: 4E2c(m)

4
JTC(JD)

V Nature of whiskers. A. Grohman and J. Krylow (Polish Acad. Sci., Wrocław). *Dokl. Akad. Nauk SSSR*, 1977, 235, 477-8 (1977).—A technique for polishing and etching the transverse-section of Si whiskers was developed for examn. by field ion microscopy. Typical micrographs are shown revealing the structure of Si whiskers. Seymour M. Kaye

GROHMAN, Antoni

Superconductive magnet for 101 kOe. Postępy fizyki 15
no.5:559-564 '64.

1. Department of Low Temperatures, Institute of Physics,
Polish Academy of Sciences, Wrocław.

GROHMANN, E.

Increasing the efficiency of production in our metallurgical plants.

p. 367 (Hutnik, Vol 7, no. 11, Nov. 1967, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EFAI) LC. Vol. 7 no. 2,
February 1968

RUCINSKI, J.; GROHMAN, R., mgr inz.

Review of publications. Przegl telekom 36 no.10:295-296 0 '64.

RUCINSKI, J.; GROHMAN, R.

Review of publications. Przegl telekom 37 no.2:58-61
F '65.

1977, no. 11: 757-777, 1974.

Results on the reaction mechanism in the chemical and physical
reaction of polyamides by the reaction of the polymer. Polyamide
no. 9 no. 11: 757-777, 1974.

1. Institute of Chemistry of the Academy of Sciences of the
USSR, Moscow. Institute of Chemistry, Moscow.

MARK, Istvan, dr.; FUREDI, Erzsebet, dr. ; GROHOLY, Eva, dr.

Involvement of the gastro-intestinal tract in Brill-Symmers
disease. Magy onk. 8 no.1:58-64 Mr'64

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GROHOLY, Tivadar

Recent results in the seismic exploration in Hungary. Geofiz kozl
10 no.1/4:77-78 '62.

C-ROIS, 425

SA

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621.316.933 - 82

Tubular lightning arresters based on a new gas-generating material. Butkevich, U., Grois, E., and Zelikin, M. Elektrichestvo (No. 7) 25-6 (July, 1946) In Russian. - Design and characteristics are given for a tubular arrester using polymerized methyl methacrylate. The high moisture-resistance of this material obviates the necessity for removal in winter. E. R. A.

ASB. I. A. METALLURGICAL LITERATURE CLASSIFICATION

NO.	DATE	BY	REMARKS
1	1946	U. Butkevich	Design and characteristics are given for a tubular arrester using polymerized methyl methacrylate.
2	1946	E. Grois	The high moisture-resistance of this material obviates the necessity for removal in winter.
3	1946	M. Zelikin	E. R. A.

GHOIS, Ye.S.

Requirements to insulation levels of the d.c. transmission
line between the Stalingrad Hydroelectric Power Station and
the Donets Basin. Izv.NIIPT no.3:100-114 '58. (MIRA 12:1)
(Electric power distribution--Direct current)

GROIS, Ye. S., ROSSE, A. V., TURTSKIY, V. S.

"400 k V D.C. Transmission Line Stalingrad-Donbass."

report to be submitted for Intl. Conference on Large Electric Systems (CIGRE),
18th Biennial Session, Paris, France, 15-25 Jun 60.

RECEIVED
JAN 11 1964
FBI - NEW YORK

Immunological and Epidemiological Effectiveness of Live Poliomyelitis Vaccine in the USSR *

А. А. МОРОЗОВ; А. И. ДРОЗДОВ; В. А. П. БЕЛИКОВ;
О. М. ОНУЛЕНКО; Г. М. ГАБРИЯН; В. И. ПЛЕШКО; В. А. КАНТОНОВ; К. Н.
Л. И. КИРОВО; А. К. О. ВАЛЕНТИН; В. И. ВОТКАЛОВ; А. В. П. ЗИЛОВА

[illegible]

Prisoner of the World Beach Concentration, Vol. 23, No. 6, 2900

FROM THE DEPARTMENT, INST. OF EXPERIMENTAL MEDICINE, DENVER ACAD. MED. SCH.

GROISMAN, S.D.

Relation of pyloric motor reactions to its functional state. Biul. eksp. biol. i med. 46 no.12:18-22 D '58. (MIRA 12:1)

1. Iz Otdela fiziologii pishchevareniya i krovoobrashcheniya (sav. - dots. P.G. Bogach) Instituta fiziologii (dir. - dots. P.G. Bogach) Kiyevskogo gosudarstvennogo universiteta imeni T.G. Shevchenko, Predstavlena deystvitel'nym chlenom AMN SSSR V.N. Chernigovskim.
(PYLORUS, physiol.

motor reactions to mechanical stimulation at rest & with full stomach (Rus))

CZECHOSLOVAKIA

M. VOJTECHOVSKY, S. GROJ and V. VIZEK, Institute for Nutritional Research (Ústav pro výživu výživu), Fourth Psychiatry Department Kra; Institute of Public Health (Ú. Psychiatrické oddelení ÚHÚZ (Krajské ústav národního zdraví), and Institute for Experimental Therapy (Ústav experimentální terapie), Prague.

"Clinical and Experimental Study of Central Effects of Adrenochrome."

Prague, Czechoslovak Psychiatry, Vol 28, No 6, 1962, pp 382-393.

Abstract [English summary modified]: Synthetic adrenochrome, from one home-made and one imported batch, administered sublingually 15 or 30 mg. to 15 volunteers including 3 psychiatric patients. Psychotic reactions were nearly universal, resembling LSD and psilocybin effects in some of the patients. Comprehensive data from this study tend to confirm hypothesis of Saskatchewan group that schizophrenia is somehow related to metabolic deficiencies of epinephrine breakdown. Tabl., 2 graphs; 3 Czech, 1 Soviet, 13 Western references.

GROJEC, Maciej; WROBLEWSKI, Tadeusz, E.

Effect of potassium on vascular resistance. Acta physiol. pol.
14 no.5:561-570 S-0'63

1. Z Zakladu Patologii Ogolnej i Doswiadczalnej AM w Warszawie;
kierownik: prof. dr. J. Walawski.

★

GROJEC, ~~Mieczyslaw~~; WROBLEWSKI, Tadeusz, E.

Effect of calcium on vascular resistance. Acta physiol. pol.
14 no.6:613-622 N-D'63

1. Z Zakladu Patologii Ogolnej i Doswiadczalnej AM w Warszawie;
kierownik: prof.dr. J.Walawski.

*

GROKHER, B.Ya.

Calculi of the palatine tonsils. Zhur. ush., nos. i gorl. bol.
22 no.1:85-87 Ja-F '62. (MIRA 15:5)

1. Iz otdeleniya bolezney ukha, gorla i nosa (zav. - N.N.Poletayeva)
Chernovitskoy oblastnoy klinicheskoy bol'nitsy.
(TONSILS--DISEASES) (CALCULI)

ACC NR: AP7003649

SOURCE CODE: UR/0020/67/172/001/0087/0089

AUTHOR: Savitskiy, Ye. M. (Corresponding member AN SSSR); Burkhanov, G. S.;
Bokareva, N. N.; Grokhochinskiy, A. S.; Ottenberg, Ye. V.

ORG: Institute of Metallurgy im. A. A. Baykov, Academy of Sciences, SSSR (Institut
metallurgii Akademii nauk SSSR)

TITLE: Effect of original crystallographic orientation on the recrystallization
temperature wire obtained from molybdenum single crystals

SOURCE: AN SSSR. Doklady, v. 172, no. 1, 1967, 87-89 and insert facing p. 77

TOPIC TAGS: molybdenum single crystal, ~~molybdenum~~ recrystallization temperature,
~~molybdenum~~ crystal orientation, *single crystal growing*

ABSTRACT: Pure molybdenum single crystals were grown along three different axes
and wires were drawn from these crystals and annealed at various tempera-
tures to determine the temperature of recrystallization. Wires obtained
from single crystals with an original orientation of 24° from [100] had
the lowest temperature of recrystallization (650C) and wires obtained
from crystals with an orientation of [110] had the highest temperature
of recrystallization (950C). Microalloying with zirconium and titanium
significantly increases the temperature of the beginning of recrystalliza-
tion. Wires obtained from microalloyed molybdenum single crystals with
an orientation of [110] had the highest temperature of recrystallization

UDC: 669.017

Card 1/2

ACC NR: AP7003649

(1700C) and those obtained from crystals with an orientation of 24° from [100] had the lowest (1300C). Thus, by growing single crystals of molybdenum, microalloyed with zirconium and titanium, along the [110] and [100] orientations, the recrystallization temperatures of wires obtained from the crystals can be increased to 1600—1700C. Orig. art. has:

2 figures and 3 tables.

[TD]

SUB CODE: 20// SUBM DATE: 13Jun66/ ORIG REF: 002/ OTH REF: 001/
ATD PRESS: 5115

Card 2/2

1. [Name], [Name] Mikheylovna, [Name] Biol. nauk; [Name] [Name]
[Name] Mikheylovna, [Name] Biol. nauk; [Name] [Name], [Name], [Name].

[Vectors of human disease] Perenositeli boleznei [Name] [Name].
Moskva, Izd-vo "Znanie," 1964. 47 p. (Izvestiya v oblasti nauki,
tehniki. VIII Seriya obshchego reditstva, no. 17)
(No. 17:2)

PARIBOK, V.P.; GROKHOL'SKAYA, N.V.

Comparative investigation of the toxicity of nitric oxide
and nitrogen peroxide. Farm. i toks. 25 no.6:741-746 N-D '62.

(MIRA 17:8)

1. laboratoriya radiatsionnoy tsitologii (zav. - doktor med.
nauk prof. V.P. Paribok) Instituta tsitologii AN SSSR.

GROKHOL'SKAYA, N.V. [deceased]; KACHURINA, N.A.; THUNOV, L.A.

Mechanism of the toxic effects of isopropylbenzene hydroperoxide.
Farm. i toks. 27 no.1:83-87 Ja-F '64.

(MIRA 17:11)

LITVINOV, N.S.; NIKITINA, Ye.L.; GROKHOL'SKAYA, S.D.

Determination of the color index of drinking water with the
FEK-N-57 apparatus. Gig. i san. 28 no.6:54-55 Je'63 (MIRA 17:4)

1. Iz laboratorii desnyanskogo vodoprovoda Kiyeva.

LITVINOV, N.S., inzh.; NIKITINA, Ye.L., inzhener-khimik;
GROKHOL'SKAYA, S.D., laborant

Method of determining the turbidity of water by means of
the FEK-N-57 apparatus. Gig. i san. 28 no.7:48-49 J1 '63.
(MIRA 17:1)

1. Iz sanitarno-bakteriologicheskoy laboratorii desnyanskogo
vodoprovoda Kiyeva.

^H
GROKOL'SKAYA, V.S.
^A

"Growth and Formation of Trees in City Streets," Zhil. kom. khoz., 2, No.8,
1952

GROKHOLISKAYA, V.S., kandidat sel'skokhozyaystvennykh nauk; KUNTSEVICH, I.P.,
kandidat tekhnicheskikh nauk.

Transplanting large bare-root trees. Gor.khoz.Mosk. 31 no.6:31-32
Je '57. (MLRA 10:7)

(Moscow--Tree planting)

GROKHOL'SKAYA, V.S., Kandidat sel'skokhozyaystvennykh nauk

Using landscaped plantings in new housing blocks. Gor.khoz.Mosk.
35 no.4:24-26 Ap '61. (MIRA 14:5)
(Landscape gardening)

GROKHOL'SKAYA, V.S., kand.sel'skokhozyaystvennykh nauk

Let's improve the planning of landscape gardening within blocks.
Gor.khoz.Mosk. 35 no.6:14-16 Je '61. (MIRA 14:7)
(Moscow—Landscape gardening)

L 23080-66 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(1) BC

ACC NO: AP6019138

SOURCE CODE: UR/0107/66/000/001/0004/0004

AUTHOR: Grokholskiy, A. (Doctor of technical sciences); Sobolevskiy, K. (Candidate of technical sciences)

ORG: none

TITLE: In Novosibirsk -- on automatic control ¹⁴

SOURCE: Radio, no. 1, 1966, 4

TOPIC TAGS: electronics conference, automatic control, electric measurement, cybernetics

ABSTRACT: Recently, the Seventh All-Union Conference on Automatic Control and Methods of Electrical Measurements was held in Novosibirsk. 670 delegates from 55 cities of the Soviet Union, as well as scientists from Hungary, Poland, Czechoslovakia and the GDR heard 118 reports. Five sections worked: the section of the theory of measuring information systems; the section of automatic digital measurement equipment; the section of primary measuring transducers and elements of measuring systems; the independent section, concerned with the results of measurements connected with studies of the properties of living organisms in their ability to receive and process information on the surrounding medium; and the section of electrical equilibrating measurement circuits. [JPRS]

SUB CODE: 09, 06 / Pionica B SUBM DATE: none

Card 1/1 ^{h/}

GROKHOL'SKIY, A. L.

Grokhol'skiy, A. L.

"Model Measurements of Capacity of Primary Discharge (From 10 to 0.0001 of for Audio Frequencies)." Commission on Standards, Measures, and Measuring Instruments, Council of Ministers USSR. All-Union Scientific Inst of Metrology imeni D. I. Mendeleev. Leningrad, 1955. (Dissertation for the Degree of Candidate Technical Sciences.)

Knizhnaya Letopis'; No. 27, 2 July, 1955

AUTHOR:: Grokhol'skiy, A.L. SOV-115-58-3-31/41

TITLE: A Set of Standard Measures for Checking Quality Factor Meters (Nabor obraztsovykh mer dlya poverki izmeriteley dobrotnosti)

PERIODICAL: Izmeritel'naya tekhnika, 1958, Nr 3, pp 90 - 91 (USSR)

ABSTRACT: The described set, consisting of 8 coils and 4 high-frequency condensers, is designed for checking "KV-1" and "KU-1" Q-meters, the most extensively used Q-meters in the USSR, in accordance with instructions "203-56" of Komitet standartov, mer i izmeritel'nykh priborov (Committee of Standards, Measures and Measuring Devices). It was developed by Novosibirskiy gosudarstvennyy institut mer i izmeritel'nykh priborov (NGIIMP) (Novosibirsk State Institute of Measuring Devices). The whole set of the coils, 7 "KID" coils and 1 "KIPD", reveal the total error of a Q-meter.

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SOV-115-58-3-31/41

A Set of Standard Measured for Checking Quality Factor Meters

The maximum error of the coils themselves is 3% at a frequency up to 25 megacycles and 5% at frequency up to 100 megacycles. The "KID" coils can also be used for checking high-frequency inductance meters "IIYeV-1", as well as Q-meters "160a", "170a" and "622a". There is 1 photograph.

1. Measurement--Standards
2. Laboratory equipment--Design
3. Instruments--Testing equipment

Card 2/2

AUTHOR: Grokhov'skiy, A.L. 207/115-50-6-27 '43

TITLE: Three-terminal Condensers of Small Capacity (Trëkhkontaktnyye kondensatory maloy yemkosti)

PERIODICAL: Izmeritel'naya tekhnika, 1956, Nr 6, pp 65-66 (USSR)

ABSTRACT: In the Novosibirsk State Institute of Measures and Measuring Devices a three-terminal capacitor set type KMYe-4 has been developed. It has a capacity ranging from 0.0001 to 1 pF. A diagram of this capacitor is shown in Figure 1. The electric circuit diagram is shown in Figure 2. The capacitor is especially useful in connection with other devices, e.g. for measuring the inter-electrode capacity of radio tubes. The resistance diagram of the capacitor is shown in Figure 3. The capacitor set KMYe-4 is produced for a frequency of 1,000 cycles with an error of 0.1-2%. There are 3 diagrams.

ASSOCIATION: Novosibirskiy gosudarstvennyy institut mer i izmeritel'nykh priborov (Novosibirsk State Institute of Measures and Measuring Devices)

Card 1/1

GROKHOL'SKIY, A.L.

Standard capacitor for frequencies up to 200-300 megacycles per
second. Izv. tekhn. no. 6:43-47 Je '60. (MIRA 14:2)
(Frequency measurements)

9.6000

S/115/60/000/010/017/028
B021/B058

AUTHOR: Grokholskiy, A. L.

TITLE: Excluding the Error of the Quality Meter of the Type KB-1
(KV-1) ¹⁴ ₂₈

PERIODICAL: Izmeritel'naya tekhnika, 1960, No. 10, pp. 52-56

TEXT: The quality of an ideal oscillating circuit consisting of the capacitance C, the inductance L, and the active resistance R, is determined from formula

$$Q = \frac{\omega L}{R} = \frac{1}{\omega CR}$$

A residual capacitance Co occurs in the induction coil between the windings, as well as considerable losses, leading to a comparatively complicated equivalent coil circuit (Fig. 1). In order to determine the coil parameter, the coil is connected to the measuring condenser of the Q-meter (Fig. 2) and the potential e is introduced into the oscillating circuit obtained. The equivalent circuit (Fig. 3) of the oscillating circuit for the most widely used Q-meter of the type KV-1 is studied and mathematically expressed in order to improve the scheme. The averaged parameters of

Card 1/2

Excluding the Error of the Quality Meter
of the Type KB-1 (KV-1)

S/115/60/000/010/017/028
B021/B058

the Q-meter which were obtained at the NGIMIP (Novosibirskiy gosudarstvennyy institut mer i izmeritel'nykh priborov (Novosibirsk State Institute of Measures and Measuring Instruments) are mentioned next and recommended for use. In Fig. 4, the values of the input resistances of the vacuum-tube voltmeter are mentioned for various frequencies. The dependences of the actual quality Q_k , shown in Figs. 5 and 6, are calculated by means of the mentioned values of the residual parameters. N and K are shown in Figs. 7 and 8 as a function of the frequency. By introducing improvements, it becomes possible to increase the real precision of the quality determination up to 10% by means of the KV-1 meter. The quality of the induction coils may be measured with an error of about 3% by means of such selected measuring instruments and by introducing improvements according to formula 15. There are 8 figures and 1 Soviet reference.

✓
B

Card 2/2

h1257
S/194/62/000/007/157/160
D413/D308

AUTHOR: Grokhol'skiy, A.L.

TITLE: A device based on a twin-T network for measuring admittances over the band 1 - 250 mc/s

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 7, 1962, abstract 7-7-284 k (Tr. Konferentsii po avtomat. kontrolyu i metodam elektr. izmereniy, 1959, Novosibirsk, Sib. otd. AN SSSR, 1961, 149 - 156)

TEXT: The paper describes the construction and operation of the admittance measuring device (IPP-1), designed for the checking of reference standards of conductance at frequencies up to 250 Mc/s. The circuit consists of two T-networks differing in their coupling components. The parameters of the bridge can be calibrated using only a single susceptance standard. Standard coaxial cylindrical capacitors of OKVCh (OKVCh) type were used for the calibration. The upper working frequency limit for these capacitors is determined by the relation $\lambda_{\min} \approx 7 - 8 / 1$ for a measurement accurate to within

Card 1/2

A device based on a twin-T network ... S/194/62/000/007/157/160
D413/D308

the order of 0.1 %, 1 being the length of the capacitor. The construction of the twin-T bridge is described. The instrument is built in block form. Its sensitivity is not worse than 0.001 pF, and the reproducibility of measurements is not worse than 0.007 %. 2 references. [Abstracter's note: Complete translation.]

Card 2/2

9.2310
9.2110 (1001, 1145, 1153)

20449
S/115/61/000/003/013/013
B124/B204

AUTHOR: Grokhol'skiy, A. L.

TITLE: A standard disk capacitor with semivariable capacity for frequencies up to 200 Mops

PERIODICAL: Izmeritel'naya tekhnika, no. 3, 1961, 55-57

TEXT: The high-frequency disk capacitor KB4-8 (KVCh-8) devised at the NGIMIP (=Novosibirskiy gosudarstvennyy institut mer i izmeritel'nykh priborov - Novosibirsk State Institute of Measures and Measuring Instruments) has lately been improved and critically examined in order to employ it more frequently in control engineering and in research. The chief advantage of this capacitor is the low degree of dependence of its effective capacity on the frequency of operation. At frequencies of 20 - 30 Mcps and with an error in measurement of the order of magnitude of 0.5 - 1%, the capacity of the capacitor may be regarded to be independent of frequency, and, at sonic frequency, to be equal to the capacity of the capacitor. At higher frequencies or when it is necessary to reduce the error, correction factors have to be introduced

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20449

S/115/61/000/003/013/013

B124/B204

A standard disk capacitor...

in the value of the low-frequency capacity of the capacitor; these factors are discussed in the following. The capacitor consists of two disk electrodes at a distance d from one another, with coinciding symmetry axes. An equivalent scheme may be established for the capacitor, consisting of the constant capacity C_0 connected in series to the residual

inductance of the capacitor L_ω and shunted with the conductivity g

(Fig.1). The effective capacity may be calculated from the equation

$C_e = C_0 / (1 - \omega^2 L_\omega C_0)$ (1). The amount of the residual inductance L_ω of the capacitor is calculated from its geometrical dimensions; the equation for this was quoted first by R. King and then by N. A. Kouzov, viz.

$L_\omega = (d/2) 10^{-9}$ henry (2), where d denotes the interelectrode distance; the equation holds for frequencies for which the radius of the capacitor disks a is much smaller than the wavelength. When wavelength and size of the capacitor electrodes are comparable, the relation

$L_\omega = (d/2) [1 + (1/3)\pi^2(a/\lambda)^2] 10^{-9}$ henry (3) holds. When the inductance L_0 of the parts joining the capacitor to the measuring system, the

Card 2/4

UX

A standard disk capacitor...

S/115/61/000/003/013/013
B124/B204

expression $C_e = C_0 / [1 + \omega^2 C_0 (L_w + L_0)]$ (4) holds for the effective capacity.

The semivariable disk capacitor KVCh-8M for 25 - 1250 pf is shown in Fig.3. It consists of a massive brass base 1 with a number of ring fins for strengthening the structure and simultaneously represents the low-potential electrode of the capacitor. On the one side, the base ends in the joining part and on the other in the central axis contact 3 which is mounted by means of the insulator ring 6 of steatite. The upper high-potential electrode 2 has stability fins, too. The interelectrode distance can be altered by the pair of screws 7. The fixation of the position of the electrodes and the lowering of the resistance to passing through is set by the nut 5. The high-potential electrode is screened by the casing 4 on the bottom of which usually a plugged window for exact tuning is located. All parts of the capacitor were heated to 300 - 400°C for 3 hr and then cooled down. The range of capacities of this capacitor is 25 - 1250 pf at an electrode diameter of 100 mm. The losses in the capacitor were determined in the frequency range of 70 - 200 Mcps. The error of measurement of the effective capacity only seldom attains 0.2 - 0.5% when a KVCh-8M device is used at frequencies of

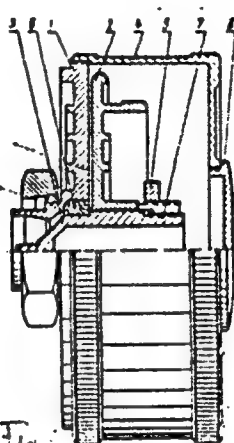
Card 3/4

A standard disk capacitor...

20449
S/115/61/000/003/013/013
B124/B204

up to 30 Mcps and arbitrary values of the static capacity. At higher frequencies, the error depends on the amount of the correction term in the denominator of (4); if it is less than 20%, then the error does not exceed 1%. There are 3 figures.

Fig. 3



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GROKHOL'SKIY, A.L.

Frequency response of the magnitudes of capacitance measures.
Izm.tekh. no.7:47-48 J1 '61. (MIRA 14:6)
(Electric capacitance—Measurement)

9.2110 (001, 1153, 1395)

27730
S/200/61/000/008/004/004
D218/D306

AUTHOR: Grokhol'skiy, A.L.

TITLE: Calculating the capacitance of a precision piston capacitor
for frequencies up to 300 Mc/s

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Sibirskoye otdeleniye, no.8,
1961, 119 - 121

TEXT: The author reports a calculation of the capacitance of a piston capacitor, whose geometrical configuration as shown in the figure (W_0 , W_1 and W_2 are the wave impedencies of the sections of the capacitor). At low frequencies the variations in the capacitance may be described by

$$C_H = C_1 (1 - k) + C_2 k, \quad (1)$$

where

$$C_1 = \frac{1}{181 \pi \frac{D_4}{D_1}}$$

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Calculating the capacitance of ...

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S/200/61/000/008/004/004
D218/D306

for the first section of the capacitor ($\mu\mu$ F/mm), and

$$C_2 = \frac{1}{181 \pi \frac{D_4}{D_3} + 181 \pi \frac{D_2}{D_1}}$$

for the second section. The effective capacitance at high frequencies may be obtained by considering the current and voltage distributions, whose boundary values are indicated in the figure. Since losses in copper or brass electrodes are small, one can carry through the analysis using the theory of long lines with infinitely large admittance. The relation between the input and output voltages is then given and the current by

$$I_1 = j U_2 \left[\frac{1}{W_1 + W_2} \sin \pi \frac{k}{\lambda} \cdot \cos 2 \pi \frac{1-k}{\lambda} + \frac{1}{W_0} \cdot \sin 2 \pi \frac{1-k}{\lambda} \cdot \cos 2 \pi \frac{k}{\lambda} \right]$$

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S/200/61/000/008/004/004

D218/D306

Calculating the capacitance of ...

The input admittance of the line for $l > \frac{\lambda}{4}$ is capacitive and can, therefore, be replaced by the capacitance of an equivalent capacitor C_B subject to the condition

$$Y_1 = \frac{I_1}{U_1} = j \omega C_B ;$$

The final result is

$$C_B = \left[\frac{\operatorname{tg} 2\pi \frac{l-k}{\lambda}}{\omega W_0} + \frac{\operatorname{tg} 2\pi \frac{k}{\lambda}}{\omega (W_1 + W_2)} \right] \times \frac{1}{1 - \frac{W_0}{W_1 + W_2} \cdot \operatorname{tg} 2\pi \frac{k}{\lambda} \cdot \operatorname{tg} 2\pi \frac{l-k}{\lambda}}. \quad (2)$$

The first and second terms in the square brackets represent the high frequency capacitances of the corresponding parts of the capacitor. Since the ratio

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S/200/61/000/008/004/004
D218/D306

Calculating the capacitance of ...

of the wave impedances may be replaced by the ratio of the capacitances, so that $W_0/(W_1 + W_2) = C_2 / C_1$, it is found that the final formula is

$$C_B = \frac{C_H + C_1 p_1 (1 - k) + C_2 p_2 k}{1 - \frac{C_2}{C_1} \operatorname{tg} 2\pi \frac{k}{\lambda} - \operatorname{tg} 2\pi \frac{1 - k}{\lambda}} \quad (3) \quad \text{H}$$

The leading term in Eq. (3) (which is C_H) is most conveniently measured, rather than calculated, using low frequency determinations. This leads to increased accuracy since the edge effects are then automatically taken into account. Experimental tests showed that piston capacitors will reproduce the effective capacitance on 200 Mc/s to an accuracy of 0.1 - 0.2 %. It is emphasised that this accuracy can only be achieved if the diameters of all the electrodes are maintained constant to within $\pm (2 - 3)$. There are 1 figure and 2 Soviet-bloc references.

ASSOCIATION: Institut avtomatiki i elektrometrii Sibirskogo otdeleniya AN

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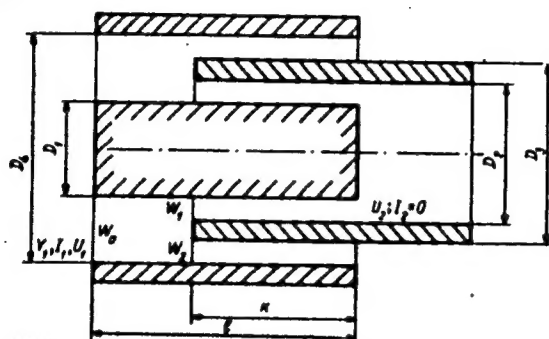
Calculating the capacitance of ...

27730
S/200/61/000/008/004/004
D218/D306

SSSR, Novosibirsk (Institute of Automation and Electrometry of the Siberian Branch AS USSR)

SUBMITTED: March 1, 1961

Fig:



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GROKHOL'SKIY, A.L.

High-frequency coaxially-cylindrical condenser with a noncontact
piston. Izv.tekh. no.11:48-49 N '61. (MIRA 14:11)
(Frequency measurements)

GROKHOL'SKIY, A.L.

Problems in designing adapters for measuring high-frequency
devices. Izv.tekh. no.11:48-50 N '62. (MIRA 15:11)
(Electronic measurements—Equipment and supplies)

GROKHOL'SKIY, A.L.

Device of the measurement of magnetic characteristics of materials
in a frequency range of 10 kilocycles \pm 20 megacycles with the
help of a coaxial holder. Trudy inst. Kom.stand.mer i im.prib no. 241
208-213 '62. (MIRA 16:5)

(Magnetic measurements--Equipment and supplies)